



Research in Business & Social Science

IJRBS VOL 9 NO 6 ISSN: 2147-4478

Available online at www.ssbfn.net

Journal homepage: <https://www.ssbfn.net/ojs/index.php/ijrbs>

Workplace loneliness and employee creativity from a positive perspective

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ARTICLE INFO

Article history:

Received 10 October 2020

Received in rev. form 24 Oct 2020

Accepted 26 October 2020

Keywords:

Workplace loneliness, employee creativity, personal identity, team identification, social identity

JEL Classification:

L1, L2

ABSTRACT

In recent years, feeling lonely in the workplace has become a serious issue that has gained growing concern due to its complex outcomes. Limited research is available on workplace loneliness and empirical research on workplace loneliness is still in infancy. The purpose of this quantitative research study is to determine whether a positive relationship exists between workplace loneliness and employee creativity in tourism industry of Maldives. I propose a moderated mediation model in which workplace loneliness foster employee creativity via personal identity and knowledge hiding hinders it, and this affect is moderated by team identification. Role transition and social identity theory is used as an explanatory framework for workplace loneliness and employee creativity. Results from a study of 204 individuals show that workplace loneliness is positively and significantly related to employee creativity. Further analysis identified that personal identity is positively and significantly related to the relationship of workplace loneliness and employee creativity. The discussion concludes that a subjective and personal experience; workplace loneliness can foster employee creativity. These results contribute to the literature on creativity and workplace loneliness by clarifying how and what influences of workplace loneliness is related to employee creativity. Recommendation for further research are given.

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Introduction

Loneliness is defined as an unpleasant feeling induced due to individual's perception of lacking social relation in social environment (Peng, Chen, Xia, & Ran, 2017). It is an emotion that can easily be affected by the influence of working situation (Zhou, 2018). Being alone is a subjective state and it can be regarded as an individual's choice or ability (Perlman & Peplau, 1984). In recent years, feeling lonely in the workplace has become a serious issue that has gained growing concern due to its complex outcomes. Previous studies have shown that workplace loneliness can impact individual behavior (Lam & Lau, 2012), work performance (Ozcelik & Barsade, 2018), commitment (Chan & Qui, 2011; Ertosun & Erdil, 2012) turnover intention (Chen, Wen, Peng, & Liu, 2016), job satisfaction (Chan & Qui, 2011) and well-being (Killeen, 1998; Erdil & Ertosun, 2011). Finding from a recent study shows that loneliness and social isolation increase risk for premature motility, another study shows that 53% of the people in the U.S felt intensely lonely in their public lives (Moss, 2018; McPherson, Smith-Lovin, & Brashears, 2006).

Although loneliness has been extensively investigated from the perspective of clinical psychology, the concept of workplace loneliness is yet to be explored and investigated. Despite the link of personal identity, and knowledge hiding on employee creativity, we know very little on how workplace loneliness can affect personal identity, knowledge hiding and employee creativity. Building on the literature of workplace loneliness, employee creativity, personal identity, knowledge hiding and team identification, I developed a model in which people draw from social identity theory to establish individual's personal identity in the workplace. Furthermore, Individual use social identity in dealing with knowledge hiding consequences in the workplace. While characteristics of role transition affect the prevalence of workplace loneliness by adjusting their identity to add value for themselves. Consequently, the process of team identification will influence the behavior of knowledge hider to acquiescent the norms and values of team through social identity to fit into the team and for the benefit of themselves.

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<https://doi.org/10.20525/ijrbs.v9i6.911>

The goal of this quantitative research study is to determine whether a positive relationship exists between workplace loneliness and employee creativity in tourism industry of Maldives. Tourism is the backbone of the Maldives economy contributing to 21% to the country's Gross Domestic Product (GDP) directly (National Bureau of Statistic, 2019). Understating the effects of workplace loneliness on employee creativity is important for several reasons.

First, the increased use of internet, emergence of virtual teams, implementation of alternate work options, employee has less incentives for in-person interactions, (Lam & Lau, 2012; Moss, 2018), and more incentive for knowledge hiding (Connelly, Zweig, Webster, & Trougakos, 2012). More and more organizations are implementing telecommuting options as employee prefers flexible and independent work options, and this leads for less intensive on team identification (Huettermann, Doering, & Boerner, 2016). Previous studies on social identity has shown that lack of social exchange affects employee's outcome (Lam & Lau, 2012) and it effects how people respond to a request for knowledge (Connelly, Zweig, Webster, & Trougakos, 2012). Second, companies in tourism industry are looking for more flexible, adaptable workforce as they themselves seek to transform their companies into being more flexible and adaptable in response to changing market and customer needs. Job requirement in tourism-related fields, requires, communicative skills, empathy, motivation, decision-making abilities, planning abilities and improvisation abilities (Zehrer & Mossenlechner, 2009). Resorts and tourism related companies are seeking way to differentiate their product and services from competitors, thus they are looking for individuals who has adaptable ability to cope with the changing environment, and the ability to handle conflict, creative problem solving, tolerance, and flexibility skills. Therefore, individuals working in the resorts and tourism industry is important in maintaining of identity. Accordingly, examining the personal factors that may have an impact on employee creativity (Dutton, Roberts, & Bednar, 2010) is important. Since, creative behavior is most often a result of individual responding to the demands of their environment (Carnevale, Hunag, Crede, Harms, & Uhl-Bein, 2017) and employee creativity is triggered because situation requires it and it is subjective (Unsworth, 2001). Creativity emerges when individuals foresee problems and challenges in goal pursuit (Hirst, Knippenberg, & Zhou, 2009). Many scholars have assumed that creative outcomes of employee behavior are to a certain degree pre-determined by various contextual and personal factors (Naglieri & Kaufman, 2001). Third, recently workplace loneliness has become a serious issue that has gained much attention from scholars. Limited research is available on workplace loneliness and empirical research on workplace loneliness is still in infancy. Thus, the purpose of this study is to explore this important yet unexplored workplace phenomenon; that is workplace loneliness and its effect on employee creativity from a positive perspective, and the underlying mechanisms and boundary conditions within the context of tourism industry of Maldives. In the following sections, I briefly review the literature of workplace loneliness and employee creativity and explain how employees adjust their identities in rectifying workplace loneliness for creative outcomes. I found support from the hypothesis in a sample of 204 employees working in tourism industry of Maldives. I, then discuss the implications of the findings to the study of workplace loneliness and employee creativity.

Literature Review

Theoretical and Conceptual background

In today's rapidly changing and competitive work environment, it is crucial for organizations to foster employee creativity (Peng & Wei, 2016) to adapt in response to the changing markets. Creativity referring to the development of novel and useful ideas (Hirst, Knippenberg, & Zhou, 2009) is an important factor in gaining competitive advantage. Creativity is an ability manifested by performance in critical traits, such as test contests, etc. The ideas must be both novel and appropriate to the goal in order to be identified as creative. Creative behavior is most often a result of individual responding to the demands of their environment (Carnevale, Hunag, Crede, Harms, & Uhl-Bein, 2017). As stated by Eysenck (1993), creativity is linked with unusual behaviors such as insanity. He linked insanity with heightened form of creativity- the genius. Though loneliness is not a psychological disorder (Erdil & Ertoşun, 2011), it is often presumed to have a spatial distribution (Ertoşun & Erdil, 2012). It is a perceived deficit in one's social interaction (Weiss, 1973). According to Weiss (1973), there are two types of loneliness; emotional loneliness and social loneliness. He stated that emotional loneliness is caused due to absence of close or intimate ties, whereas social loneliness is caused due to lack of involvement in social interactions. Therefore, it is important to establish an identity in dealing with workplace loneliness. Personal identity serves an important purpose for enhancing and maintaining a sense of self-worth (Gecas, 1982). Personal identity refereeing to self-categorization of defining an individual as a unique person in terms of their individual differences (Aguilar, Brañas-Garza, Espinosa, & Miller, 2010). People revise, and alter their identity based on the situation (Ibarra & Barbulescu, 2010). Identity, makes a critical contribution to employee creativity (Sica, Ragozini, Palma, & Sestito, 2017). Creativity can be interpreted as an individual ability to adjust (Csikszentmihalyi, 1996). Creativity was considered a personality trait useful for adaptation and maladjustment of individuals to environments (Sica, Ragozini, Palma, & Sestito, 2017). According to Csikszentmihalyi (1996), creative individuals are remarkable for their ability to adjust in any given situation and to make do with whatever is at hand to reach their goals. Furthermore, it is a potent predictor of social problem-solving (Csikszentmihalyi, 1996). According to socialization research, identity transition requires new skills, behavior and attitudes (Ibarra & Barbulescu, 2010). Through identity transition people adjust their emotions between what people really feel and the image they feel compelled to convey in workplace (Ibarra & Barbulescu, 2010). Workplace loneliness is associated with negative feelings (Perlman & Peplau, 1984). The concept of workplace loneliness has been defined as an unpleasant feeling induced due to individual's perception of lacking social relationships in the workplace (Perlman & Peplau, 1984; Peng, Chen, Xia, & Ran, 2017; Zhou, 2018). Studies on workplace loneliness shows that workplace loneliness have both negative and positive effects on employee. Prior researches highlighted it can impact individual behavior and well-being (Erdil

& Ertosun, 2011; Lam & Lau, 2012; Chen, Wen, Peng, & Liu, 2016), work performance (Lam & Lau, 2012) and have tendency to induce turnover (Ertosun & Erdil, 2012). An empirical study from China shows that lonelier workers are satisfied with their job and are committed to their organization (Chan & Qui, 2011), indicating that workplace loneliness can be a double-edge sword. Peplau and Perlman (1982) noted that “some scholars, such as (Moustakas, 1975)”, believe that loneliness can lead to positive outcomes. Studies on psychology has demonstrated individual wish to create positive identity in their work domain (Turner, 1975; Gecas, 1982; Dutton, et al., 2010). According to social psychology literature individuals may have different identities (Ashforth & Mael, social identity theory and the organization, 1989). Interaction between identities depends on individual motivation (Autiero, 2015). When individuals sense the workplace loneliness, through adaptive approach they would try to find a solution to workplace loneliness. Creativity at work are often produced by problems and challenges that arise in the pursuit of work goals (Shalley S. E., 1991). Previous studies suggest that employees are most likely to experience creative behavior when they feel they are valuable and worthwhile (May, Gilson, & Harter, 2004; Olivier & Rothmann, 2007). Behaviors are triggered either through self-determined choice or external demands base upon a clearly defined problem (Unsworth, 2001). Dutton et al. (2010) states that Individual’s work is a portrait of his identity. People wish to create positive identity in their work environment (Turner, Social comparison and social identity: Some prospects for intergroup behaviour, 1975; Gecas, 1982; Dutton, Roberts, & Bednar, Pathways for postive identity construction at work: Four types of postive identity and the building of socila resources, 2010). Identity researchers demonstrated people who perform physical, social and moral taint, use strategies to maintain a sense of positive self-regard for an otherwise defamed identity (Ashforth & Mael, social identity theory and the organization, 1989; Kreiner, Ashforth, & Sluss, 2006; Dutton, Roberts, & Bednar, Pathways for postive identity construction at work: Four types of postive identity and the building of socila resources, 2010). People who belong to negatively categorized social identity (workplace loneliness) may reinstate positive regards by downplaying the salience of the undervalued identity (Dutton, Roberts, & Bednar, Pathways for postive identity construction at work: Four types of postive identity and the building of socila resources, 2010). Researchers demonstrated with adaptive approach individual can systematically alter the content of identity to achieve a more appropriate fit with a set of internal or external standards. According to this view individual with sense of workplace loneliness can undergo sense-breaking to create a new identity (Dutton, Roberts, & Bednar, Pathways for postive identity construction at work: Four types of postive identity and the building of socila resources, 2010). Scholars have identified that personality characteristics associated with creative people include accommodating opposite or conflicting traits in one’s self-concept (Barron & Harrington, 1981). A positive work-related identity can provide individuals with positive outcomes (Caza, Bagozzi, Woolley, Levy, & Caza, 2010; Dutton, Roberts, & Bednar, Pathways for postive identity construction at work: Four types of postive identity and the building of socila resources, 2010). Individual differences in work environment may ignite a need for creative behavior due to the external expectation of social connection and being creative adds value and makes a worthwhile person (Ashforth & Mael, social identity theory and the organization, 1989; Unsworth, 2001; Janssen & Van Yperen, Employees’ goal orientations, the quality of leader-member exchange, and the outcomes of job performance and job satisfaction, 2004; May, Gilson, & Harter, 2004; Olivier & Rothmann, 2007). It takes time for individuals to acquire and harness new knowledge for creative solutions (Weisberg, 1999).

The unique condition of Maldives tourism is that a tourist resort in the Maldives is built on an exclusive hotel on its own island, one island-one resort, with its population entirely consist of tourists and the staff of the hotel, with no local populations (National Bureau of Statistic, 2019). Working in a challenging work environment where individuals are to ignite intrinsic interest in task itself, challenging work provides a means to develop skills and knowledge and those working in the resort will have ample time for themselves to invest in new idea generation (Perlman & Peplau, 1984; Weisberg, 1999; Unsworth, 2001). According to social identity theory the self-concept is comprised of personal identity embracing distinctive characteristic significance to him within a group he is associated with (Turner, Social comparison and social identity: Some prospects for intergroup behaviour, 1975; Ashforth & Mael, social identity theory and the organization, 1989). A developing sense of who we are define where one is and what is expected (Ashforth & Mael, social identity theory and the organization, 1989). The situational definition- workplace loneliness and self-definition personal identity, both emerge through symbolic interactions (Ashforth & Mael, social identity theory and the organization, 1989). It is the individual’s perception of being his or her own social identity that defines him. A person can experience workplace loneliness yet can be a creative employee because creativity begin with employee (Oldham & Cummings, 1996). Sense of identity is the root cause of all honest creative effort is originated (Farmer, Tierney, & Kung-Mcintyre, 2003).

Empirical Review and Hypothesis Development

The Mediating role of Personal Identity

Social identity theory is often used to analyze the process of self-categorization of the employee in the organization (Blau, 1964; Turner, Social comparison and social identity: Some prospects for intergroup behaviour, 1975; Ashforth & Mael, social identity theory and the organization, 1989; Aguiar, Brañ as-Garza, Espinosa, & Miller, 2010; Horowitz, 2012). Turner (1975) defined social identity theory as individual’s knowledge that he belongs to certain social groups together with some emotional and value significance to him within a group he is associated with. According to Aguiar et al. (2010) social identity use only a portion of the personal identity, the potion individual shares with others. Personal identity, is define as people’s concept of who they are and how they relate with others as a process of self-categorization (Aguiar, Brañ as-Garza, Espinosa, & Miller, 2010). It is about filling the action to the image one has or wish to have for oneself (Davis, 2006). The sense of personal identity stems by the feedback individuals get about the self from social relations and associated with self-views (Riley & Burke, 1995). The generation of personal identity reflects a self-

regulatory interpretative process of sense making in which relevant inputs from others and oneself are reconciled in an attempt to verify, support, and validate the identity (Riley & Burke, 1995). Scholars have suggested that challenging work environment can initiate personal identity (Caza, Bagozzi, Woolley, Levy, & Caza, 2010). Parallel to this view, Aguiar, et al. (2010), claims that a personal identity reflects an internalized set of role expectations, with the importance of the identity being a function of commitment to a relevant role. It brings continuity in a sense of self within a person, and how that person is socially regarded. Since I am investigating workplace from a positive perspective, I will be examining the positive aspect of personal identity (Turner, Social comparison and social identity: Some prospects for intergroup behaviour, 1975; Gecas, 1982; Dutton, Roberts, & Bednar, Pathways for positive identity construction at work: Four types of positive identity and the building of social resources, 2010). Researchers have conducted different studies on how individuals create and maintain positive identity (Kreiner, Ashforth, & Sluss, 2006). Researchers have exhibited the way individuals maintain a positive identity at work when their association is ambiguous (Bartel & Dutton, 2001). Bartel and Dutton (2001), states that when the association is ambiguous, it pushes individuals to go beyond the periphery to create their identity in the organization. Furthermore, Dollinger et al. (2005) conducted a study on students who were information seeking in style, and he suggests that personal identity had the greatest number of creative accomplishments in their young life in comparison to normative or collective identities (Dollinger, Dollinger, & Centeno, 2005). Liu (2017), articulated how Chinese Australian professionals adjusted their identity by repenting themselves as exotic commodities, which helped them gain recognition among their White colleagues. Individuals utilize their self-defining traits in construction or repair their identity (Caza, Bagozzi, Woolley, Levy, & Caza, 2010).

There is a sufficient evidence that personal identity is linked with favorable outcomes. Positive work-related identity can provide individuals with an enhancement capacity to deal with adversity and stress (Caza, Bagozzi, Woolley, Levy, & Caza, 2010) facilitates access to knowledge networks (Cheng, Sanchez-Burks, & Lee, 2008) and promote adaptation to new work settings (Amabile, 1988). Personal identity motivates individuals to take actions that promotes positive outcomes (Dutton, Roberts & Bednar, 2010). For example, someone who experience workplace can develop his personal identity as a loner with the action of investing his time and effort on modifying work procedures for efficiency and can add value and meaning to his-self in altering work procedure. According to social psychology literature personal identity reflects the distinctive aspects that make an individual a unique being (Deaux, 1993; Jetten, Postmes, & McAuliffe, 2002). These perceptions reflect behavioral expectations and, more importantly, expectations about whom others expect one to be and whom they want to be. In workplace, social interaction is a basic expectation, however, an employee may not find genuine social connections, therefore he may prefer to work independently, and it maybe his preference. Researchers has provided ample support for the effects of social categorization on personal identity. Scholars has demonstrated that individual performance depends on their identity (Akerlof & Kranton, 2005), when women with breast cancer was given an opportunity to voice their fear prior to rating their perceived vulnerability, the negative effect of gender identity salience was eliminated (Punitoni, Sweldens, & Tavassoli, 2011). When employees experience workplace loneliness, they often reflect upon themselves to create a self that fits for the situation in order to fulfil the requirement of the organization and to add meaning to their self (Dutton, Roberts & Bednar, 2010).

Individuals often makes a positive evaluation of their personal identity, by evaluating the work-related characteristics and competencies that differentiate them as an individual (Dutton, Roberts & Bednar, 2010). Theoretical arguments have suggested that personal identity, in turn, makes a critical contribution to employee creativity. Previous study suggests that personal identity is determined by the maintenance of sets of fundamental beliefs, principles and commitments and about self-worth that are arguably unique to a specific person (Greenwood, 1994). Identity plays a major role of intentional behavior (Ibarra & Barbulescu, 2010). When individuals are faced with unexpected events (workplace loneliness), individuals draw from coherence and plausibility by creating and updating stories that draw on personal histories and available discourses to create their personal identity (Caza, Bagozzi, Woolley, Levy, & Caza, 2010).

The fundamental beliefs, principles and commitments determine the things oneself care about in everyday life. It determines the sort of actions one takes in achieving the goals. It is true process of creating person identity (Aguiar, Brañas-Garza, Espinosa, & Miller, 2010). Being identified oneself as a loner provides a unique identity and the unique identity may add self-worth. Scholars suggests that emergence of the situation and personal identity are entwined (Ashforth & Mael, 1989). Theory of social identity posit that situational definition; workplace loneliness and self-definition; unique person, both emerge through symbolic interactions. Furthermore, research on creativity suggests that sense of identity is the root cause of all honest creative effort is originated (Farmer, Tierney, & Kung-Mcintyre, 2003). Individual's perception of being, his or her own social identity is important for maintaining personal identity (Aguiar, Brañas-Garza, Espinosa, & Miller, 2010; Ashforth & Mael, 1989). The individual does not need to share the same values as other members of the organization (Aguiar, Brañas-Garza, Espinosa, & Miller, 2010; Ashforth & Mael, 1989). It is arguable that individual with a personal identity does not require to behave in a same manner as colleagues does. His personality can be identified as a unique individual in the organization. He can maintain his own unique identity as a loner, in the organization, as, desire for identifications affectively creates champions (Aguiar, Brañas-Garza, Espinosa, & Miller, 2010; Ashforth & Mael, 1989). Personal identity fosters individual's participation in creating unique ideas. This process gives individuals a feeling of greater control over the work situation and enhanced sense that his or her own behavior can make a difference in work results while promoting the sense of identity. Therefore, it is reasonable to argue that personal identity influences employee creativity. According, I propose;

H₁: *Individual with stronger identity is likely to be socially independent, hence positively related to employee creativity*

The Mediating role of Knowledge Hiding

Knowledge hiding is defined as an individual's deliberate effort to avoid or withhold knowledge requested by other person (Connelly, Zweig, Webster, & Trougakos, 2012) and knowledge hiding may influence employee creativity. Organizations do not "own" the intellectual assets of employees, and as such, cannot coerce employees to transfer their knowledge to other members of the organization (Connelly, Zweig, Webster, & Trougakos, 2012). A review of literature indicates that there are three way of knowledge hiding; evasive hiding, rational hinging and playing dumb (Connelly, Zweig, Webster, & Trougakos, 2012). Interpersonal relationship, social exchange, distrust may influence knowledge hiding behavior (Labafi, 2017).

Knowledge hiding can help employees to retain exclusive informational power embedded in technical and know-how (Rhee & Choi, 2017). Accordingly, individuals can easily form an ownership feeling over a target if they have constant control over it (Pierce, Kostova, & Dirks, 2001; He, 2013) additionally, employee will be unwilling to share the target of ownership with others because they will experience loss of control and negative emotions based on lack of social identity. (Blau, 1964; Turner, 1975; Pierce, Kostova, & Dirks, 2001). Since the knowledge is acquired, controlled or created by the individual, they will easily feel that knowledge is their personal property (He, 2013). Knowledge is defined as a nontangible and very value resource in gaining competitive advantage and knowledge is the main source of creativity (Jarvenpaa & Majchrzak, 2008). Though organizations are designing mechanisms to enhance knowledge sharing within organizations, success has been elusive (Connelly, Zweig, Webster, & Trougakos, 2012). The reluctant to share knowledge is due to many reasons, such as distrust due to lack of social identity or employee behavior or to avoid hurting someone's feelings (Connelly, Zweig, Webster, & Trougakos, 2012).

Conversely knowledge hiding can be driven by one's desire to achieve higher performance (Rhee & Choi, 2017). Knowledge hiding may impair teamwork, development of new ideas, implementation of policies and procedures, and may impact creativity (Connelly, Zweig, Webster, & Trougakos, 2012). The main element in knowledge hiding is distrust (Connelly, Zweig, Webster, & Trougakos, 2012). Trust is built through interpersonal relationship (Blau, 1964). There are similarities in behavior among the knowledge hider and those who experience workplace loneliness. First, the main cause for both workplace loneliness and knowledge hiding is lack of interpersonal relationship at work. Second, both behaviors will impede over time, due to workers ability to establish and maintain positive relationship at work through social identity (Duffy, Ganster, & Pagon, 2002). Previous studies show that knowledge hiding may have a positive intent or outcome from personal perspective, a "white lie", in the organization (Blau, 1964; Connelly, Zweig, Webster, & Trougakos, 2012). This behavior may exist in order to protect the feelings of the person requesting for the knowledge, maintaining confidentiality on some issues or to protect the interest of a third party (Connelly, Zweig, Webster, & Trougakos, 2012). Therefore, it does not always consider to have a negative outcome. However, it is beyond the scope of this study. In this study I will be examining the negative impact of knowledge hiding.

Knowledge hiding is normally governed by unspoken social exchange between individuals (Blau, 1964). Social identity among workers is important with regards to knowledge and workplace loneliness. Developing social identity of where one is and what is expected will help in dealing with situation when individuals are faced with knowledge hiding, workplace loneliness and employee creativity. Social identity is likely to represent a significant component in dealing with workplace loneliness and knowledge hiding. Concurrently social identity will act as mechanism to foster creativity (Blau, 1964).

The nature of relationship may affect individuals' behavior and the characteristics of the knowledge itself will affect individual's knowledge hiding. Given that individuals are rewarded for performance, and given that time spent attending to a request for knowledge may detract from time available to devote their own tasks, therefore it is important to consider how knowledge request may relate to detract from the core requirements of an individual's responsibilities (Connelly, Zweig, Webster, & Trougakos, 2012). According to scholars, employees would be expected to engage in knowledge hiding if the requested knowledge would require undue time or effort to explain, because this would affect their ability to achieve their own goals (Connelly, Zweig, Webster, & Trougakos, 2012) or creative effort.

According to (Blau, 1964), lack of social identity among individuals will prompt in lack of social exchange, that is unwillingness in exchanging information, or be not forthcoming in relation to providing requested information. Correspondingly, lack of social identity is directly related to knowledge hiding and indirectly related to workplace loneliness and it may hinder employee creativity (Connelly, Zweig, Webster, & Trougakos, 2012). Because withholding knowledge may be a threat to beneficial outcome (Černe, Hernaus, Dysvik, & Škerlavaj, 2017) including employee creativity. The behavioral characteristics of knowledge hiding and workplace loneliness is linked with social identity. The quality and the nature of the relationship will affect the acceptability of any behaviors (Seiter & Bruschke, 2007). Knowledge hiding is negatively reciprocated by others, due to lack of social identity (Brandts & Sola, 2001). Knowledge hidrs will be locked in their own perspective and will have difficulty in accessing collective knowledge network (Perry-Smith, 2006).

Consequently, their opportunity to produce creative outcome is limited (Ohlsson, 2011). These employees may not be aware of the urgent issues and up-to-date changes due to lack of social identity at work (Ohlsson, 2011). Thus, will fail in generating what is useful for organizational performance and generating creative ideas. Therefore, I hypothesize:

H₃: *Knowledge hiding is likely to be engage in weaker social identity, hence negatively related to employee creativity*

The Moderating role of Team Identification

Although, generally, we expect workplace loneliness to positively influences personal identity, there is some evidence that individuals differ in the extent to where they belong in a group. To assess this prospect, I draw from the team identification theory (Aguiar, Brañas-Garza, Espinosa, & Miller, 2010). Team identification can be defined as the process by which individual team members perceive themselves in terms of the values, goals, attitudes, and behaviors they share with other, whereas personal identity refers to the extent to which individual see themselves as different from the other team members in their thoughts, feelings, and behaviors (Turner, Hogg, Oakes, Reicher, & Wetherell, 1987, Van Knippenberg, 2000). The process of identification can only unfold in relation to an identification target. In the case of team identification, the target is the collective team identity which is defined as the specific characteristics (i.e., values, norms, attitudes, and behavioral standards) that are central for the team. Draw from social identity theory, initially social and personal identity approach relates to each other (Turner, Hogg, Oakes, Reicher, & Wetherell, 1987).

According to this logic when individuals become part of the team, employee can have his own personal identity and may become a member of the team. When employee becomes a member of the team, their sense of self is shaped in the heart of the team, fitting individual action to team identification. Ashforth & Mael, 1989; Aguiar, Brañas-Garza, Espinosa, & Miller, 2010; Huettermann, Doering, & Boerner, 2016), creating a powerful and personal motivation to contribute to the team's goals and successes (Vugt & De Cremer, 1999; Van Knippenberg, 2000). Scholars has demonstrated that employee's efficiency improves when they identity with their company (organization identity) (Aguiar, Brañas-Garza, Espinosa, & Miller, 2010), another scholars has suggested that to maximize the utilities, individual must not only maximize their effort, but must fit into the category, referring to a group (Akerlof & Kranton, 2005). Individuals belong to several social entities, they can have different foci of identification (Riketta & van Dick, 2005). An individual can have his or her own unique characteristics, that distinguishes him from others within a group. For example, an IT technician, who experience workplace loneliness, joined a team for a specific project, he will contribute his expertise, maintaining his personal identity as IT technician and may still experience workplace loneliness due to lack of genuine connection or lack of social identity among the team, yet he can still be a member of the team. Individuals in teams have to balance the need to identify with the team and the need to feel like a differentiated individual by emphasizing one's individuality (Hornsey & Jetten, 2004). A person may have a higher sense of self when accommodating the behavior prescribed by the reference group (Aguiar, Brañas-Garza, Espinosa, & Miller, 2010).

Using social identity approach team identification can motivates individual members to cooperate with other team members, while maintaining their identity. Additionally, individual differentiation is as much important as team identification for individual team members to produce creative ideas that can serve as vital input to team innovation process (Janssen & Huang, 2008). Team identification involves a sense of emotional attachment to the team (Chang, Wann, & Inoue, 2018), however, the emotional attachment may vary in degree according to the situation and circumstances (Riketta & van Dick, 2005). It is likely that team members' positivity may facilitates identification.

Unique identity facilitates employees' belongingness regarding their team because group affect regulates members' attitudes towards the group. It has been found that positivity meaning individual identifying them as worthy would result in interpersonal attraction sociability and identification (Lin, He, Baruch, & Ashforth, 2017). When people are primed with a positive attitude, they are more likely to feel sociable and exhibit a stronger preference for social situations (Lin, He, Baruch, & Ashforth, 2017). Following this logic, it can be reasoned that team identification may balance team cohesion and identification in a way that would influence the behavior of the employee who experience workplace loneliness through social identity. Therefore, I hypothesize:

H₃: *Team identification will moderate the relationship between workplace loneliness and personal identity in such a way that the relationship will be positive when team acceptance is high and negative when team acceptance is low.*

Through social identification individual is argued to viciously take part in the success and status of the team (Horowitz, 2012). Therefore, the need to belong to a team may overtake the need to hide information. A team climate may foster creativity by generating multiple ideas and more exposure and receptivity for new idea generation (Černe, Hernaus, Dysvik, & Škerlavaj, 2017). Scholars suggests that establishment of team identification indirectly influence employee creativity and it could help to develop positive emotional state such as psychological safety which in turn contributes to share knowledge within the team members (Baer & Frese, 2003; Černe, Hernaus, Dysvik, & Škerlavaj, 2017). Empirical research has shown that team identification to be positively related to team members willingness to engage in activities that benefit their team, members are willing to communicate and cooperate and share knowledge for team performance (Dutton, Dukerich, & Harquail, 1994; Dukerich, Golden, & Shortell, 2002; Huettermann, Doering, & Boerner, 2016).

According to social identification, individuals categorize themselves and others into various social categories (Tajfel & Turner, 1985). In the process of identifying with a team, individuals adopt the main and unique characteristics of the team in terms of values, attitudes and behavioral standards, thus the need for belongingness supersedes the need to hide information (Blau, 1964; Huettermann, Doering, & Boerner, 2016). Characteristics of the team represents "who we are as a team" and are the defining features adopted by team members in the process of team identification (Huettermann, Doering, & Boerner, 2016). Depending on the circumstances, team members may enact social identity for which they perceive the highest fit with the situational context; for example the need for creative idea generation, information sharing for the contribution of team performance, tendency for self-esteem enhancement, and to maintain a positive image for oneself (Brewer, 1991; Tajfel & Turner, 1985). Individuals within the organization often retain

multiple identities (van Dick, Wagner, Stellmacher, & Christ, 2004; Ashforth, Harrison, & Corley, 2008). The process of identification can only unfold in relation to an identification target, the means for belongingness, due to social interaction may facilitate knowledge sharing which boosts willingness in innovative behavior (Riketta & van Dick, 2005; Baer & Oldham, 2006). Therefore, I hypothesize:

H4: Team identification will moderate the relationship between workplace loneliness and knowledge hiding in such a way that the relationship will be positive when team acceptance is high, and negative when team acceptance is low.

Based on the above analysis, the theoretical framework is shown in Figure 1.

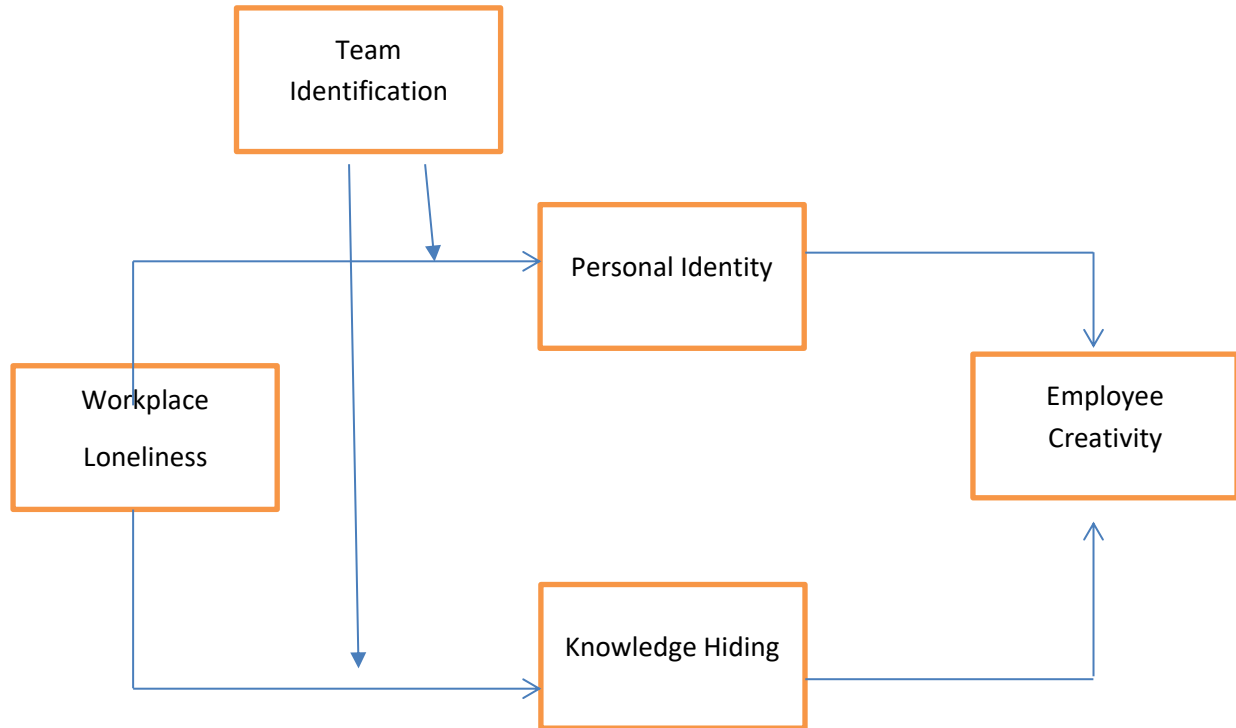


Figure 1: Theoretical Framework

Research and Methodology

Research Context

The target sample for this study was individuals working in tourism industry of Maldives. The reason for choosing Maldives was that; first, in Maldives, this area of research is relatively new, and to the researchers' knowledge, no such study was found on the relationship of workplace loneliness and employee creativity. Tourism is the backbone of the Maldives economy contributing to 21% to the country's Gross Domestic Product (GDP) directly (National Bureau of Statistic, 2019). Main target of Maldives tourism industry are high spending long haul travelers. Second, Maldives has a unique concept on tourism, one island one resort, meaning each hotel is established on a secluded island with its population entirely consist of tourists and the staff of the hotel, with no local populations. This provides exclusivity and privacy to tourists, but the downside of it is the employees are secluded from their families (National Bureau of Statistic, 2019). The population of the resort consist of mixed nationality, culture and race.

Sampling procedure

In the sample selection process, different operators were approached in tourism industry asked whether they were interested in participating the study and several agreed to participate in the distribution of the survey. Questionnaire was sent via email through connections. The advantages of using email survey was it is relatively cost effective and participants can complete it on their own time and place of convenience.

Each participant was informed of the full purpose of the study and their rights as participants through a use of cover letter in the invitation email. The researcher recognized the potential for emotional concern that may accompany questions related to workplace loneliness and knowledge hiding. To minimize the potential concern, every effort was made to ensure to yield the most information with the least amount of invasiveness and was assured of confidentiality maintenance. At any point, participants could decide to

withdraw from completing the questions. Since the data collection was done through email, each participant was able to complete the survey on their own time, a place of convenience for them.

In order to reduce the negative impact of potentially high non-response rates, the invitation to complete survey was distributed through connection by email, to the participants of different operators, representing approximately 1,150 individuals. Each operator was contacted and several agreed to participate in the distribution of the survey. Of the total population, 204 individuals participated, representing a response rate of 17.3%.

Instrumentation

Data was collected by means of a questionnaire containing 34 items. The first eight items on the questionnaire comprise the *workplace loneliness* is measured using the 8-item, adapted from UCLA Loneliness Scale (Russell, Peplau, & Cutrona, 1980). Prior research in loneliness has accepted UCLA scale as the standard instrument to capture the sense of loneliness (Franzoi & Davis, 1985; Shaver & Brennan, 1991). The UCLA scale includes both positive and negative worded items and has proven psychometric properties in terms of reliability, convergent validity and discriminant validity (Russell, Peplau, & Cutrona, 1980; Hays & DiMatteo, 1987; Shaver & Brennan, 1991; Cacioppo, Hughes, Waite, Hawkey, & Thisted, 2006). To capture loneliness in the workplace, I added the phrase 'at work' to contextualize each item. Sample items include 'There are people I can turn to at work' (reverse scored) and 'at work, people are around me but not with me.' Previous research has made similar adaptations of the UCLA loneliness scale to measure loneliness at work (Dussault & Thibodeau, 1997). The items are measured on an ordinal scale ranging from 1 (strongly disagree) to 7 (strongly agree).

Employee Creativity is measured by the 4-item creativity scale of (Baer & Oldham, 2006). This creativity scale taps actions perceived by participants in this exploratory research to reflect the view of employee creativity. Here is a sample item: "I Introduce new approaches to improve my work" and items are measured on an ordinal scale ranging from 1 (strongly disagree) to 7 (strongly agree).

Knowledge hiding is assessed with the 4-item scale developed by (Connelly, Zweig, Webster, & Trougakos, 2012) and the scale opens with the following statement: "I often agreed to help my colleague but never really intended to?", and items are measured on an ordinal scale ranging from 1 (strongly disagree) to 7 (strongly agree).

Personal identity is measured using 3-item adapted from (Callero, 1985) role identity scale to measure the extent to which the creative employee had been incorporated into personal identity and I modified the items' wording to reflect centrality of personal identity as a creative employee and a sample item stated; "I see myself as someone with individual characteristics", and items are measured on an ordinal scale ranging from 1 (strongly disagree) to 7 (strongly agree).

Team identification measured by using 5-item adapted from (Ellemers & Ouwerkerk, 1999). social identification scale and a sample item stated "Making a lasting contribution to groups that I belong to, such as my work organization, is very important to me", ranging from 1 (strongly disagree) to 7 (strongly agree).

Control variables; I collected data for controls likely to provide alternative explanations for creativity as suggested by previous research (Oldham & Cummings, 1996; Farmer, Tierney, & Kung-Mcintyre, 2003). To reduce the likelihood that individuals' demographic characteristics would confound relations examined in this research, five characteristics were measured and controlled in analyses: age (in years), education (were coded, "Master's Degree or above" = 1; "Bachelor's Degree" = 2; "Associate Degree" = 3; "High School or below" = 4), tenure (in years) (for the company and for the same department or team), sex (male were coded 1; female were coded 2), and job position was measured as a dichotomous dummy variable coded (entry level were coded 1; low level were coded 2; middle level were coded 3; high level were coded 4; top management were coded 5).

Variable of Interest

I construct five indicator variables, which is equal to one or zero. We proxy for the employee creativity by workplace loneliness, to construct this variable, I first find the arithmetic average of the total scores that the employees have chosen for the 8 loneliness questions on the survey. If the average is higher than 4, I assigned the worker to be categorized as lonely. I chose 4 as the cut off value, this was the median score on the survey. For all other variables in the model, I averaged the items into single indicators, except for knowledge hiding. I proxy for the workplace loneliness by knowledge hiding, to construct this variable we first find the arithmetic average of the total scores that the employees have chosen for the eight loneliness questions and three knowledge hiding questions on the survey. If the average is higher than 2.5, I assigned the worker to be categorized as a knowledge hider.

The adjustment of 2.5 as a cut-off for knowledge hiding was done because, knowledge hiding is a sensitive phenomenon that could be perceived as socially undesirable, and people tend to under-report such phenomena (Connelly, Zweig, Webster, & Trougakos, 2012). When it comes to knowledge hiding individual will involve in rationalized hiding, evasive hiding or provide incomplete information when situation leads it.

As data was collected I noticed that people were not forthcoming in response to knowledge hiding questions. As, they may not want to let others know that they are knowledge hinders. The fact that employees reported these incidents at all, when they could have reported no incidents, suggests that these behaviors occur in organizations.

Data Analysis and Results

The majority of the participants falls within the 20 to 30 years old range (87.25%). According to census 2014 of Maldives, it shows the highest labor force participation rate falls between 20-24 years (Maldives population and housing census, 2014) and majority of the gender was male (60.78% male, 39.22% female). According to bureau of statistics figures from Maldives, shows that there is a huge difference between male and female workers observed in tourism industry. Out of the total employees only 10% of the employee are female of which only 3% were local female employees (National Bureau of Statistic, 2019). The lower number of women working in the resorts is partly a reflection of the societal norms and stereotypical gender roles whereby household responsibilities and care work are primarily seen as women's responsibility. Additionally, women are less mobile to work outside their islands given their family responsibilities. Existing work environment in the resorts are also not favorable to local women, whereby most resorts located separately from inhabited islands and these jobs require employees to live in the resort. More than half of the sample (63.24%) indicated that they have high school or below education, highest degree they had earned was a Master's degree (2.45%). More than a half of the respondents (69.12%) indicated that they had been working in the same department for 5 years or less while nearly a similar number (67.65%) indicated that they had been with the company for 5 years or less. The majority of the responded, (92.65%) are in the middle level positions, followed by high level (4.41%) and low level (2.94%).

Error! Not a valid bookmark self-reference. shows the means, standard deviations (SDs) and correlation among the variables. The result shows that workplace loneliness is positively and significantly related to employee creativity ($r = 0.13$, $p < 0.15$), personal identity ($r = 0.11$, $p < 0.15$). Personal identity is positively and significantly correlated with employee creativity ($r = 0.09$, $p < 0.1$).

Table 1: Mean, Standard Deviation (SD) and Correlations

Variables	Count	Mean	SD	Skewness	1	2	3	4	5
1. Creativity	172	0.8431	0.3646	-1.8871	1				
2. Workplace loneliness	74	0.3627	0.4820	0.5710	0.1292	1			
3. Personal Identity	159	0.7794	0.4157	-1.3477	0.0956	0.1063	1		
4. Knowledge hiding	46	0.2255	0.4189	1.3137	-0.2511	0.276	0.0607	1	
5. Team identification	131	0.6422	0.4805	-0.5931	0.0717	-0.1812	0.0714	-0.209	1

n = 204,

Hypothesis testing using STATA logistic probability model

Table 2 provides logistic probability model for the mediating effect of personal identity on the relationship of workplace loneliness and employee creativity. The predictions were that individuals with stronger identity is likely to be socially independent, hence positively related to employee creativity. I test this hypothesis by estimating the following logistic regression. Summary of the hypothesis testing is shown in Table 2. I first introduced into the equation;

$$CR_i = \alpha + \beta(WL_i \cdot PI_i) + \Gamma_i + \delta_i + \gamma_i + \epsilon_i$$

Where $WL_i \cdot PI_i$, is an interaction between WL_i and PI_i . Therefore, $WL_i \cdot PI_i$ is equal to one, if the employee is categorized to be lonely and has a personal identity. Since the dependent variable is binary we use logistic regression on the estimations.

I account for identity controls with Γ_i , this controls for age and gender. δ_i , Controls for education, department experience and organizational experience. I also include γ_i , it controls for position level. The results are reported in Table 2

I run 4 regression, with different controls. In this first panel with no controls, I found a positive relation between personal identity and employee creativity at the 10% statistically significant ($r = 0.06$).

In the second panel 2, I control for age and gender. In this panel, I found a positive relationship and this is a significant relationship at 5% level ($r = 0.05$).

In panel three I controlled (education, department experience and organizational experience). Formal education and job experience represent personal resources available to an employee for performance (Amabile, 1988; Tierney, Farmer, & Graen, 1999). Education provides exposure to a variety of experiences (Amabile, 1988). We controlled for years of experience because tenure was included in prior creativity research (Scott & Bruce, 1994; Tierney & Farmer, 2002), because it may affect job performance (Sturman, 2003). In panel 3, we found that the relationship gets even stronger, at 5% significant level ($r = 0.04$).

Finally, I controlled for position level. Research suggests that rank is related to involvement in innovation activities and the generation of creative ideas (Ibarra & Barbulescu, 2010; Farmer, Tierney, & Kung-Mcintyre, 2003). Similar to panel three, I found positive relationship at 5% significant level.

Supporting hypothesis 1, individual with personal identity is more individualist hence was found to be significantly and positively related to employee creativity. When I include control variables in the logistic probability regression, the relationship became more significant. The more controls we have the higher the significant.

Model 2 in

Table 3 provides logistic probability for the mediating effect of knowledge hiding in the relation of workplace loneliness and employee creativity. I test the hypothesis by estimating the following logistic regression equation.

$$CR_i = \alpha + \beta(WL_i \cdot KH_i) + \Gamma_i + \delta_i + \gamma_i + \epsilon_i$$

I run 4 regression, with different controls. In the first panel with no controls, I found a negative relation between knowledge hiding and employee creativity at the 15% statistically significant. In the second panel 2, with the controlled of age and gender, I found a negative relationship at 15% level. When I controlled for education, department experience and organizational experience, we found a negative relationship. When we controlled for position level, the result was similar to panel three. Supporting hypothesis 2, I found that knowledge hiding is negatively related to employee creativity due to lack of social identity.

I test the moderated effect of team identification posited in model 3, estimating the following equations.

$$CR_i = \alpha + \beta(WL_i \cdot PI_i \cdot TI_i) + \Gamma_i + \delta_i + \gamma_i + \epsilon_i$$

The results reported in

Table 3, model 3 shows that the indirect effect of team identification on workplace loneliness and employee creativity through personal identity. The indirect effect of team identification is supporting hypothesis 3, the moderated effect of team identification on the relationship of workplace loneliness and employee creativity through personal identity is positive. We test moderated effect of team identification on model 4, estimating the following logistic regression equation.

$$CR_i = \alpha + \beta(WL_i \cdot KH_i \cdot TI_i) + \Gamma_i + \delta_i + \gamma_i + \epsilon_i$$

The results reported in

Table 3, model 4 show the moderated effect of team identification on the relationship of workplace loneliness and employee creativity through knowledge hiding. In hypothesis 4 I found that the moderated effect of team identification on the relationship of workplace loneliness and employee creativity through knowledge hiding were not supporting. According to Connelly et al. (2012) knowledge hiding may impair teamwork. Social identity theory suggest that individuals engage in identity work as they change the degree to which they associate with the team, therefore, individual may either attract or distance themselves relative to team (Caza, Bagozzi, Woolley, Levy, & Caza, 2010). Furthermore, Connelly et al. (2012) identified that individuals behave in knowledge hiding due to lack of trust, or due to complexity of knowledge. Therefore, the negative relationship individuals were more individualist and the requested knowledge may be complex.

Table 2: Summary of regression analysis for workplace loneliness predicting employee creativity

Variable	Creativity	
	Model 1	Model 2
Intercept	0.594	1.213
Pseudo R ²	0.036	0.012
Age	Yes	Yes
Gender	Yes	Yes
Education	Yes	Yes
Team/Department Experience	Yes	Yes
Organizational Experience	Yes	Yes
Potion Level	Yes	Yes

WL*PI	1.127*** (0.523)	
WL*KH		-0.629 (0.502)

Note: n = 204

Table 2 reports the results for a logistic model. Entries are correlation coefficients. The dependent variable is set to be creativity, a binary variable equal to one, if the arithmetic average of the total scores for creativity is greater or equal to 4. Standard errors are reported in parentheses. ***, **, * indicates statistical significance at 5%, 10% and 15% respectively.

Table 3: Summary of regression analysis for moderated effect of team identification

Variable	Creativity	
	Model 3	Model 4
Intercept	1.049	1.249
Pseudo R ²	0.005	0.013
Age	Yes	Yes
Gender	Yes	Yes
Education	Yes	Yes
Team/Department Experience	Yes	Yes
Organizational Experience	Yes	Yes
Potion Level	Yes	Yes
WL*TI*PI	0.309 (0.584)	
WL*TI*KH		-0.888 (0.658)

Note: n = 204

Table 3 reports the results for a logistic model. Entries are correlation coefficients. The dependent variable is set to be creativity, a binary variable equal to one, if the arithmetic average of the total scores for creativity is greater or equal to 4. Standard errors are reported in parentheses. ***, **, * indicates statistical significance at 5%, 10% and 15% respectively.

Discussion

The goal of this study was to examine the effect of workplace loneliness on employee creativity in Maldivian tourism industry context along with the underlying mechanisms and boundary conditions. The result of the present study supported the hypothesized model of workplace loneliness and employee creativity. The study can make number of contributions to this new and emerging area. The results obtained lead to four conclusions. First, the present study linked workplace loneliness and employee creativity through social identity theory. The present study proposed that individuals who experience workplace loneliness are likely to conclude that they alone and are different in the context of social identity. They adapted their behavior by experimenting and evaluating the provisional selves based on both internal and external standard. Researchers demonstrated with adaptive approach individual can systematically alter the content of identity to achieve a more appropriate fit with a set of internal or external standards. According to this view individual with sense of workplace loneliness can undergo sense-breaking to create a new identity (Dutton, Roberts, & Bednar, Pathways for postive identity construction at wrok: Four types of postive identity and the building of socila resources, 2010) to create positive work-related identities. As positive work-related identity can provide individuals with positive outcomes (Caza, Bagozzi, Woolley, Levy, & Caza, 2010; Dutton, Roberts, & Bednar, 2010. Considering that creativity is a process of finding solution to problems, self-determined individual will adjust their behavior to add value to their self by making a difference in the work outcomes (Zhang & Bartol, 2010). Hence, lonely employee get more time for oneself, and they would take it upon himself to rectify this problem of loneliness by investing their time on modifying the work procedure to improve work performance and make the job easier for themselves to be more effective at work (Shalley, Gilson, & Blum, 2000; Unsworth, 2001; Aguiar, Bran as-Garza, Espinosa, & Miller, 2010).

Second, to unfold the underlying mechanism of workplace loneliness and employee creativity, the present study investigated the influence of personal identity on employee creativity. Since workplace loneliness is a categorization, it is helpful to use social identity theory to explain the impact of it on employee creativity. Sense of identity has tendency to recruit other emotions such as joy and interest or anticipation. In other words, these positive emotions create a beautiful attractor, which can take on the negative emotion of loneliness (Tierney, Farmer, & Graen, 1999; Peng, Chen, Xia, & Ran, 2017). The responders categorized themselves as someone with unique characteristics or someone different from others or someone who is a unique person. Personal identity defined individual's place in society and through being internalized into the self, together with their emotional and value significance. Creative people are different, they are sensitive, natural, experimentalist, non-conformist and concerned as much about the development of their skills and talents as about their organization's objectives. They are strong individualists, the personal qualities make them stand out from others (Tierney, Farmer, & Graen, 1999). The present study found that personal identity plays an important mediated role in the linked between workplace loneliness and employee creativity.

Third, the present study found that knowledge hiding is negatively related to employee creativity. Knowledge hiding is normally governed by unspoken social exchange between individuals (Blau, 1964). The quality and the nature of the relationship will affect the acceptability of any behaviors (Seiter & Bruschke, 2007). Knowledge hiding is negatively reciprocated by others, due to lack of social identity (Brandts & Sola, 2001). Knowledge hidiers will be locked in their own perspective and will have difficulty in accessing to knowledge networks (Perry-Smith, 2006) due to lack of social identity. Consequently, their opportunity to produce creative outcome is limited (Ohlsson, 2011). These employees may not be aware of the urgent issues and lasted updates due to lack of social relationship at work (Kreiner, Ashforth, & Sluss, 2006).

Fourth, I found that even if individuals become part of the team, their self-identity is as much valuable as team Identification. A person may have a higher sense of self, when accommodating the behavior prescribed by the reference group (Aguilar, Brañas-Garza, Espinosa, & Miller, 2010). The need to maintain personal identity is as much important as the need to identify with the team. As expected, the results from the study of 204 individuals support the contention that loneliness is positively and significantly related with employee creativity.

Implications

The development of the moderated mediation model of workplace loneliness and employee creativity and the empirical findings in this study provides a basic and solid foundation for future enquiry about workplace loneliness on a positive perspective. First, although loneliness has been receiving growing discussion, little empirical research has been devoted to the consequence of loneliness in the workplace. In an attempt to investigate the outcomes of workplace loneliness from a positive perspective, I have identified creativity as an outcome variable associated with loneliness. I found that workplace loneliness has a positive relationship with employee creativity and personal identity is an important predictor. Future research should investigate empirically the relationship between workplace loneliness and employee creativity with different boundary conditions on individual level as well as multilevel level.

Second, I have found that personal identity is a good intervening process mechanism in linking workplace loneliness and employee creativity (Ibarra & Barbulescu, 2010). Research has shown that individual with unique identity can work independently in bringing procedural changes for creativity. Integrating these arguments into a single framework, we have identified personal identity mediates workplace loneliness and creativity.

Third, I found that lack of social identity results in knowledge hiding is a hinder of employee creativity. Knowledge hiding is negatively reciprocated by others, due to lack of social identity (Brandts & Sola, 2001). Knowledge hidiers will be locked in their own perspective and will have difficulty in accessing collective knowledge network (Perry-Smith, 2006). Consequently, their opportunity to produce creative outcome is limited (Ohlsson, 2011).

This study has several practical implications for organizational management. First, to facilitate employees' creativity, organizations should understand that specific emotions like workplace loneliness does not necessity result in negative outcomes, it in fact can fosters employee creativity. Management can establish a mechanism to encourage individuals to suggest procedural change that may increase efficiency. Let them be, encourage individuals to maintain their own personal identity as it may be an intrinsic motivation for employees.

Second, this study has shown that knowledge hiding hinders employee creativity. It is important to highlight that knowledge hiding is not necessarily a bad behavior. There may be positive, negative, or unintended consequences. It depends on the intent. Individual may engage in knowledge hiding in order to protect their own interests or the interests of their organizations, or they may hide knowledge to undermine or retaliate against another employee. Organizations can change knowledge sharing culture by demonstrating managerial support by increasing opportunities for social interactions (Connelly, Zweig, Webster, & Trougakos, 2012) and link it with reward system.

Finally, organizations ought to implement mechanism to facilitate independent working through delegation of authority. Through such mechanism, organizations can promote an environment and culture where employees are encourage working independently rather by negatively stereotyping them. Individuals in teams have to balance the need to identify with the team and the need to feel

like a differentiated individual by emphasizing one's individuality (Hornsey & Jetten, 2004). Using social identity approach team identification can motivate individual members to cooperate with other team members, while maintaining their identity. Additionally, individual differentiation is as much important as team identification for individual team members to produce creative ideas that can serve as vital input to team innovation process (Janssen & Huang, 2008).

Conclusions

The results supported the contention that loneliness was significantly related to employee creativity and that personal identity mediates this relation. Specifically, the relationship between workplace loneliness and creativity via personal identity is statistically significant.

This study stands, primarily, as an exploratory research study and is limited by several factors, including the potentially skewed nature of the sample, the homogeneity of the sample with respect to specific industry.

Ultimately, it suggests the need for more data and a better understanding of the way in which workplace loneliness can impact employee creativity. Research is also needed to determine if support from families and friends have an impact on the relationship of workplace loneliness and employee creativity. Because loneliness is an intensely private and subjective experience there are often no accurate outward signs or objective measures of loneliness which can be assessed by an independent observer. Interestingly however, many popular authors and artists use the words lonely or loneliness to describe a character's objective situation or behavior. For example, an artist working independently by himself will often be labeled by the title 'lonely'. As indicated earlier, we have to be somewhat cautious about attempting to label individual as lonely from behavioral observations, as judgments of this nature may not be accurate or representative of the actual experience of loneliness and it may not result in negative outcome. As shown from this study, a negative emotion may result in a positive outcome. Finally, investigations into the possible effect of family background and support from outside work prove useful.

Limitations and future research directions

There are certain aspects of this study that have been limited by the researcher in order to ensure that the process is able to proceed in a timely manner with the available resources. The study focused on specific industry and a specific country; tourism industry of Maldives. The viewpoints of other industry employees, while valuable, were not considered as a part of this study. The study took place solely within the boundary of tourism industry of the Maldives, limiting the generalizability of the results. It may be that different results would be obtained in multiple industry settings and it may increase generalizability of the finding of other types of employees and industry.

In addition to these issues this study is limited in a few other ways. First, loneliness is a subjective experience, the social norms and values of the society together with the personal capacities to adjust one's norms and values concerning an optimal set of relationship to changing circumstances may result in developing workplace loneliness. Yet, it is an individual choice and personal strategy towards dealing with these emotions that may shape individuals' capability in dealing with such emotions. I considered workplace loneliness to be an influencing factor for employee creativity via personal identity. Arguing that loneliness employee's will have more time to invest in creative idea generation as they are less sociable and through adaptive behavior they will adopt in new identity to add value to their self. Several studies (Tierney & Farmer, 2002; Farmer, Tierney, & Kung-Mcintyre, 2003; Rodan & Galunic, 2004), have indicated that creativity is depending on a variety of individual difference variables, such as creative role identity, personality, knowledge, and skills. An interesting direction for future study might be to assess the extent to which these individual difference variables interact with various aspects of creative process engagement to influence employee creativity. Issues of rewards continue to be important, particularly suggesting that extrinsic rewards may have varying importance of creative process, with intrinsic motivation being more important at initial stage of idea generation (Amabile, 1988; Durham & Bartol, 2012). Yet another area of interest is the extent to which workplace loneliness behaviors over time might support personal identity, potentially leading the employee to initiate in creative idea generation. As part of intrinsic motivation job design has been considered an important contributor for creativity (Amabile, 1988; Kanter, 1988; West & Farr, 1989; Oldham & Hackman, 2010). Specifically, complex, challenging jobs; those characterized by high levels of autonomy, skill variety, identity, significance, and feedback are expected to support and encourage higher levels of motivation and creativity than are relatively simple, routine jobs (Hackman, 1980; Deci, Connell, & Ryan, 1989). When jobs are complex and challenging, individuals are likely to be excited about their work activities and interested in completing these activities in the absence of external controls or constraints. It is important for future research to examine the impact of job design on the relationship of workplace loneliness and employee creativity.

This study employed methodology that is purely quantitative in nature, although similar research questions could be asked from a qualitative or mixed-methods perspective. This methodological choice was made in order to focus on the predictive nature of the variables.

For future research it is important to examine under what conditions do employees feel most lonely? And, in what work context does loneliness have the largest impact on work behavior? Prior research has revealed that loneliness is caused by a lack of attachment during early childhood development (Weiss, 1973; Heinrich & Gullone, 2006). Using organizational support theory, we would expect individuals who receive less support and guidance, especially during the early stage of their career development, to experience

loneliness (Erdil & Ertosun, 2011). Another approach suggests that loneliness is due to attribution bias, in terms of individual's expectations in meeting social relations (Heinrich & Gullone, 2006). This work suggests that future research should look into the possibility whether workplace loneliness is resulted from lack of support outside of work environment.

Overall, there are many fruitful paths for future research seeking to develop a more comprehensive understanding of the connection between workplace loneliness and employee creativity.

References

- Aguiar, F., Brañas-Garza, P., Espinosa, M. P., & Miller, L. M. (2010). Personal identity: A theoretical and experimental analysis". *Journal of Economic Methodology*, 17(3), 261-275, <https://doi.org/10.1080/13501781003792670>
- Akerlof, G. A., & Kranton, R. E. (2005). Identity and the Economics of Organizations. *Journal of Economic Perspectives*, 19(1), 9–32, <https://doi.org/10.1257/0895330053147930>
- Amabile, T. M. (1988). A Model of Creativity and Innovation in Organizations. *Research in Organizational Behavior*, 10, 123-167.
- Amabile, T. M., & Mueller, J. S. (2008). Studying Creativity, Its Processes, and Its Antecedents: An Exploration of the Componential Theory of Creativity. In *Handbook of Organizational Creativity* (pp. 33-64). New York: Lawrence Erlbaum Associates.
- Ashforth, B. E., & Mael, F. (1989). Social identity theory and the organization. *Journal of Management Review*, 14(1), 20-39, <https://doi.org/10.2307/258189>
- Ashforth, B. E., Harrison, S. H., & Corley, K. G. (2008). Identification in organizations: An examination of four fundamental questions. *Journal of Management*, 34(3), 325–374, <https://doi.org/10.1177/0149206308316059>
- Autiero, G. (2015). Social and Personal Identities: Their Influence on Scholastic Effort. *Review of Social Economy*, 73(1), 19–33, <https://doi.org/10.1080/00346764.2014.986968>
- Baer, M., & Frese, M. (2003). Innovation is not enough: climates for initiative and psychological safety, process innovations, and firm performance. *Journal of Organizational Behavior*, 24(1), 45–68, <https://doi.org/10.1002/job.179>
- Baer, M., & Oldham, G. R. (2006). The curvilinear relation between experienced creative time pressure and creativity: Moderating effects of openness to experience and support for creativity. *Journal of Applied Psychology*, 91(4), 963–970, <https://doi.org/10.1037/0021-9010.91.4.963>
- Barron, F., & Harrington, D. M. (1981). Creativity, Intelligence, and Personality. *Annual Review of Psychology*, 32, 439–476, <https://doi.org/10.1146/annurev.ps.32.020181.002255>
- Bartel, C., & Dutton, J. (2001). *Ambiguous organizational memberships: Constructing organizational identities*. Psychology Press.
- Blau, P. M. (1964). *Exchange and power in social life*. New York, NY: John Wiley & Sons.
- Brandts, J., & Sola, C. (2001). Reference Points and Negative Reciprocity in Simple Sequential Games. *Games and Economic Behavior*, 36(2), 138-157.
- Brewer, M. (1991). The social self: On being the same and different at the same time. *Personality and Social Psychology Bulletin*, 17(5), 475–482, <https://doi.org/10.1177/0146167291175001>
- Cacioppo, J. T., Hughes, M. E., Waite, L. J., Hawkey, L. C., & Thisted, R. A. (2006). Loneliness as a Specific Risk Factor for Depressive Symptoms: Cross-Sectional and Longitudinal Analyses. *Psychology and Aging*, 21(1), 140–151.
- Callero, P. L. (1985). Role-Identity Salience. *Social Psychology Quarterly*, 48(3), 203-215, <https://www.jstor.org/stable/3033681>
- Carlsen, A. (2006). Organizational becoming as dialogic imagination of practice: The case of the indomitable Gauls. *Organization Science*, 17(1), 132–149, <https://doi.org/10.1287/orsc.1050.0176>
- Carnevale, J. B., Hunag, L., Crede, M., Harms, P., & Uhl-Bein, M. (2017). Leading to stimulate employees' ideas: A quantitative review of leader-member exchange, employee voice, creativity, and innovative behaviour. *Applied Psychology*, 66(4), 517-552, <https://doi.org/10.1111/apps.12102>
- Caza, A., Bagozzi, R. P., Woolley, L., Levy, L., & Caza, B. B. (2010). Psychological capital and authentic leadership: Measurement, gender, and cultural extension. *Asia-Pacific Journal of Business Administration*, 2(1), 53-70, <https://doi.org/10.1108/17574321011028972>
- Černe, M., Hernaus, T., Dysvik, A., & Škerlavaj, M. (2017). The role of multilevel synergistic interplay among team mastery climate, knowledge hiding, and job characteristics in stimulating innovative work behavior. *Human Resource Management Journal*, 27(2), 281-299, <https://doi.org/10.1111/1748-8583.12132>
- Chan, S. H., & Qui, H. H. (2011). Loneliness, job satisfaction, and organizational commitment of migrant workers: empirical evidence from China. *The International Journal of Human Resources Management*, 22(5), 1109-1127, <https://doi.org/10.1080/09585192.2011.556785>
- Chang, Y., Wann, D. L., & Inoue, Y. (2018). The Effects of Implicit Team Identification (iTeam ID) on Revisit and WOM Intentions: A Moderated Mediation of Emotions and Flow. *Journal of Sport Management*, 32(4), 334-347, <https://doi.org/10.1123/jsm.2017-0249>
- Chen, Y., Wen, Z., Peng, J., & Liu, X. (2016). Leader-follower congruence in loneliness, LMX and turnover intention. *Journal of Managerial Psychology*, 31(4), 864-879, <https://doi.org/10.1108/JMP-06-2015-0205>
- Cheng, C. Y., Sanchez-Burks, J., & Lee, F. (2008). Connecting the Dots Within: Creative Performance and Identity Integration. *Psychological Science*, 19, 1177-1183, <https://doi.org/10.1111/j.1467-9280>

- Connelly, C. E., Zweig, D., Webster, J., & Trougakos, J. P. (2012). Knowledge hiding in organizations. *Journal of Organizational Behavior*, 33(1), 64-88, <https://doi.org/10.1002/job.737>
- Csikszentmihalyi, M. (1996). *Creativity: The Work and Lives of 91 Eminent People*. New York: HarperCollins.
- Davis, J. (2006). Social Identity Strategies in Recent Economics. *Journal of Economic Methodology*, 13(3), 371-390, <https://doi.org/10.2139/ssrn.784346>
- Deaux, K. (1993). Reconstructing Social Identity. *Personality and Social Psychology Bulletin*, 19(1), 4-12, <https://doi.org/10.1177/0146167293191001>
- Deci, E. L., Connell, J. P., & Ryan, R. M. (1989). Self-determination in a work organization. *Journal of Applied Psychology*, 74(4), 580-590, <https://doi.org/10.1037/0021-9010.74.4.580>
- Dollinger, S. J., Dollinger, S. M., & Centeno, L. (2005). Identification and Creativity. *An International Journal of Theory and Research*, 5, 315-339.
- Duffy, M. K., Ganster, D. C., & Pagon, M. (2002). Social undermining in the workplace. *Academy of Management Journal*, 45(2), 331-351, <https://doi.org/10.5465/3069350>
- Dukerich, J. M., Golden, B. R., & Shortell, S. M. (2002). Beauty is in the eye of the beholder: The impact of organizational identification, identity, and image on the cooperative behavior of physicians. *Administrative Science Quarterly*, 47(3), 507-533, <https://doi.org/10.2307/3094849>
- Durham, C., & Bartol, K. M. (2012). Pay for Performance. In E. A. Locke (Ed.). John Wiley & Sons.
- Dussault, M., & Thibodeau, S. (1997). Professional Isolation and Performance at Work of School Principals. *Journal of School Leadership*, 7(5), 521-536, <https://doi.org/10.1177/105268469700700505>
- Dutton, J. E., Dukerich, J. M., & Harquail, C. V. (1994). Organisational images and member identification. *Administrative Science Quarterly*, 39(2), 239-263, <https://doi.org/10.2307/2393235>
- Dutton, J. E., Roberts, L. M., & Bednar, J. (2010). Pathways for positive identity construction at work: Four types of positive identity and the building of social resources. *Academy of Management Review*, 35(2), 265-293, <https://doi.org/10.5465/amr.35.2.zok265>
- Ellemers, N., & Ouwerkerk, J. W. (1999). Self-categorisation, commitment to the group and group self-esteem as related but distinct aspects of social identity. *European Journal of Social Psychology*, 29(23), 371-389, [https://doi.org/10.1002/\(SICI\)1099-0992\(199903/05\)29:2<33.3.CO;2-L](https://doi.org/10.1002/(SICI)1099-0992(199903/05)29:2<33.3.CO;2-L)
- Erdil, O., & Ertosun, Ö. G. (2011). The Relationship between Social Climate and Loneliness in the Workplace and Effects on Employee Well-Being. *Procedia Social and Behavioral Sciences*, 24, 505-525, <https://doi.org/10.1016/j.sbspro.2011.09.091>
- Ertosun, Ö. G., & Erdil, O. (2012). The Effects of Loneliness on Employees' Commitment and Intention to Leave. *Social and Behavioral Sciences*, 41, 469-476, <https://doi.org/10.1016/j.sbspro.2012.04.057>
- Eysenck, H. J. (1993). Creativity and Personality: Suggestions for a Theory. *Psychological Inquiry*, 4(3), 147-178, https://doi.org/10.1207/s15327965pli0403_1
- Farmer, S. M., Tierney, P., & Kung-Mcintyre, K. (2003). Employee creativity in Taiwan: An application of role identity theory. *Academy of Management Journal*, 46(5), 827-851, <https://doi.org/10.2307/30040653>
- Franzoi, S. L., & Davis, M. H. (1985). Adolescent Self-Disclosure and Loneliness. Private Self-Consciousness and Parental Influences. *Journal of Personality and Social Psychology*, 48(3), 768-780, <https://doi.org/10.1037/0022-3514.48.3.768>
- Gecas, V. (1982). The Self-Concept. *Annual Review of Sociology*, 8, 1-33.
- Greenwood, J. D. (1994). A sense of identity: Prolegomena to a social theory of personal identity. *Journal of the Theory of Social Behaviour*, 24(1), 25-46, <https://doi.org/10.1111/j.1468-5914.1994.tb00245.x>
- Hackman, J. R. (1980). Work redesign and motivation. *Professional Psychology*, 11(3), 445-455, <https://doi.org/10.1037/0735-7028.11.3.445>
- Hays, R. D., & DiMatteo, M. R. (1987). A Short-Form Measure of Loneliness. *Journal of Personality Assessment*, 51(1), 69-81, https://doi.org/10.1207/s15327752jpa5101_6
- He, P. (2013). Why and when do people hide knowledge? *Journal of Management*, 17(3), 398-415, <https://doi.org/10.1108/JKM-12-2012-0380>
- Heinrich, L. M., & Gullone, E. (2006). The Clinical Significance of Loneliness: A Literature Review. *Clinical Psychology Review*, 26(6), 695-718, <https://doi.org/10.1016/j.cpr.2006.04.002>
- Hill, C. A. (2007). The Law and Economics of Identity. *Queen's Law Journal*, 32, 389-445.
- Hirst, G., Knippenberg, D. V., & Zhou, J. (2009). A cross-level perspective of employee creativity: Goal orientation, team learning behaviour, and individual creativity. *Academy of Management Journal*, 52(2), 280-298, <https://doi.org/10.5465/AMJ.2009.37308035>
- Hogg, M. A. (2001). A social identity theory of leadership. *Personal and Social Psychology Review*, 5(3), 184-200, https://doi.org/10.1207/S15327957PSPR0503_1
- Hornsey, M. J., & Jetten, J. (2004). The Individual Within the Group: Balancing the Need to Belong With the Need to Be Different. *Personality and Social Psychology Review*, 8(3), 248-264, https://doi.org/10.1207/s15327957pspr0803_2
- Horowitz, M. J. (2012). Self-Identity Theory and Research Methods. *Journal of Research Practice*, 8(2).

- Huettermann, H., Doering, S., & Boerner, S. (2016). Understanding the Development of Team Identification: A Qualitative Study in UN Peacebuilding Teams. *Journal of Business Psychology*, 32(2), 217-234, <https://doi.org/10.1007/s10869-016-9446-9>
- Ibarra, H., & Barbulescu, R. (2010). Identity as Narrative: Prevalence, Effectiveness, and Consequences of Narrative Identity Work in Macro Work Role Transitions. *The Academy of Management Review*, 35(1), 135-154, <https://doi.org/10.5465/amr.35.1.zok135>
- Janssen, O., & Huang, X. (2008). Us and Me: Team Identification and Individual Differentiation as Complementary Drivers of Team Members' Citizenship and Creative Behaviors. *Journal of Management*, 34(1), 69-88, <https://doi.org/10.1177/0149206307309263>
- Janssen, O., & Van Yperen, N. W. (2004). Employees' goal orientations, the quality of leader-member exchange, and the outcomes of job performance and job satisfaction. *Academy of Management Journal*, 47, 368–384, <https://doi.org/10.2307/20159587>
- Jarvenpaa, S. L., & Majchrzak, A. (2008). Knowledge collaboration among professionals protecting national security: Role of transactive memories in ego-centered knowledge networks. *Organization Science*, 19(2), 260-276, <https://doi.org/10.1287/orsc.1070.0315>
- Jetten, J., Postmes, T., & McAuliffe, B. (2002). We are all individuals": Group norms of individualism and collectivism, levels of identification, and identity threat. *European Journal of Social Psychology*, 32(2), 189-207, <https://doi.org/10.1002/ejsp.65>
- Kanter, R. M. (1988). When a thousand flowers bloom: Structural, collective, and social conditions for innovation in organizations. In I. B. (Eds.) (Ed.), *Research in organizational behavior* (pp. 169-211). Greenwich, CT: JAI Press.
- Killeen, C. (1998). Loneliness: An epidemic in modern society. *Journal of Advanced Nursing*, 28(4), 762-770, <https://doi.org/10.1046/j.1365-2648.1998.00703.x>
- Kreiner, G. E., Ashforth, B. E., & Sluss, D. M. (2006). Identity Dynamics in Occupational Dirty Work: Integrating Social Identity and System Justification Perspectives. *Organization Science*, 17(5), 619–636, <https://doi.org/10.1287/orsc.1060.0208>
- Kreiner, G., & Sheep, M. (2009). Growing pains and gains: Framing identity dynamics as opportunities for identity growth. In L. M. Roberts (Ed.), *Exploring positive identities and organizations: Building a theoretical and research foundation* (pp. 23–46). New York: Routledge.
- Labafi, S. (2017). Knowledge hiding as an obstacle of innovation in organizations a qualitative study of software industry. *AD-minister No*, 131-141, <https://doi.org/10.17230/ad-minister.30.7>
- Lam, L. W., & Lau, D. C. (2012). Feeling lonely at work: investigating the consequences of unsatisfactory workplace relationships. *The International Journal of Human Resources Management*, 23(20), 4265-4282, <https://doi.org/10.1080/09585192.2012.665070>
- Lin, C., He, H., Baruch, Y., & Ashforth, B. E. (2017). The effect of team affective tone on team performance: The roles of team identification and team cooperation". *Human Resource Management*, 56(6), 931-952, <https://doi.org/10.1002/hrm.21810>
- Liu, H. (2017). Beneath the white gaze: Strategic self-orientalism among Chinese Australians. *Human Relations*, 70(7), 781–804, <https://doi.org/10.1177/0018726716676323>
- Madjar, N., Oldham, G. R., & Pratt, M. G. (2002). There's no place like home? The contributions of work and nonword creativity support to employees' creative performance. *Academy of Management Journal*, 45(4), 757-767, <https://doi.org/10.5465/3069309>
- Maitlis, S. (2009). Who am I now? Sensemaking and identity in posttraumatic growth. In L. M. Roberts & J. E. Dutton (Eds.), *Exploring positive identities and organizations: Building a theoretical and research foundation*. In L. M. Robert (Ed.), *Exploring positive identities and organizations: Building a theoretical and research foundation* (pp. 47–76). New York: Routledge.
- Maslow, A. H. (1954). The instinctoid nature of basic needs. *Journal of Personality*, 22, 326–347.
- May, D. R., Gilson, R. L., & Harter, L. M. (2004). The Psychological Conditions of Meaningfulness, Safety and Availability and the Engagement of the Human Spirit at Work. *Journal of Occupational and Organisational Psychology*, 77(1), 11–37, <https://doi.org/10.1348/096317904322915892>
- McPherson, M., Smith-Lovin, L., & Brashears, M. E. (2006). Social Isolation in America: Changes in Core Discussion Networks over Two Decades. *American Sociological Review*, 73(6) 353–375, <https://doi.org/10.1177/000312240807300610>
- Moss, J. (2018). Helping remote workers avoid loneliness and burnout. *Harvard Business Review on Health*.
- Moustakas, C. (1975). The Sense of Slef. In *The Sense of Slef* (pp. 20-34). Merrill-Palmer Institute.
- Naglieri, J. A., & Kaufman, J. C. (2001). Understanding intelligence, giftedness and creativity using PASS theory. *Roeper Review*, 23(3), 151-156, <https://doi.org/10.1080/02783190109554087>
- National Bureau of Statistic, M. (2019). *Employment in tourism sector*. Retrieved 4 4, 2019, from <http://statisticsmaldives.gov.mv>
- Ohlsson, S. (2011). *Deep Learning: How the mind overrides experience*. Cambridge University Press.
- Oldham, G. R., & Hackman, J. R. (2010). Not what it was and not what it will be: The future of job design research. *Journal of Organizational Behavior*, 31(2-3), 463–479, <https://doi.org/10.1002/job.678>
- Oldham, G., & Cummings, A. (1996). Employee creativity: Personal and contextual factors at work. *Academy of Management Journal*, 39(3), 607–634, <https://doi.org/10.5465/256657>
- Olivier, A., & Rothmann, S. (2007). Antecedents of Work Engagement in a Multinational Oil Company. *Journal of Industrial Psychology*, 33(3), 49-56, <https://doi.org/10.4102/sajip.v33i3.396>

- Ozcelik, H., & Barsade, S. (2018). No employee an island: Workplace loneliness and job performance. *The Academy of Management Journal*, 6(61), <https://doi.org/10.5465/amj.2015.1066>
- Peng, H., & Wei, F. (2016). Trickle-Down Effects of Perceived Leader Integrity on Employee Creativity: A Moderated Mediation Model. *Journal of Business Ethics*, 150(2), 837–851, <https://doi.org/10.1007/s10551-016-3226-3>
- Peng, J., Chen, Y., Xia, Y., & Ran, Y. (2017). Workplace loneliness, leader-member exchange and creativity: The cross-level moderating role of leader compassion. *Personality and Individual Differences*, 104, 510-515, <https://doi.org/10.1016/j.paid.2016.09.020>
- Perlman, D., & Peplau, L. A. (1984). *Loneliness research: A survey of empirical findings*. US: Academic Press.
- Perry-Smith, J. E. (2006). Social Yet Creative: The Role Of Social Relationships In Facilitating Individual Creativity. *Academy of Management Journal*, 49(1), 85–101, <https://doi.org/10.5465/AMJ.2006.20785503>
- Pierce, J. L., Kostova, T., & Dirks, K. T. (2001). Toward a theory of psychological ownership in organizations. *Academy of Management Review*, 26(2), 298-310, <https://doi.org/10.2307/259124>
- Punitoni, S., Sweldens, S., & Tavassoli, N. T. (2011). Gender Identity Salience and Perceived Vulnerability to Breast Cancer. *Journal of Marketing Research*, 48(3), 413-424, <https://doi.org/10.2307/23033848>
- Rhee, Y. W., & Choi, J. N. (2017). Knowledge management behaviour and individual Creativity: Goal orientations as antecedents and in-group social status as moderating contingency. *Journal of Organizational Behaviour*, 38, 813-832, <https://doi.org/10.1002/job.2168>
- Riketta, M., & van Dick, R. (2005). Foci of attachment in organizations: A meta-analytic comparison of the strength and correlates of workgroup versus organizational identification and commitment. *Journal of Vocational Behavior*, 67(3), 490–510, <https://doi.org/10.1016/j.jvb.2004.06.001>
- Riley, A., & Burke, P. J. (1995). Identities and self-verification in the small group. *Social Psychology Quarterly*, 58(2), 61–73, <https://doi.org/10.2307/2787146>
- Roberts, L. M., Dutton, J. E., Spreitzer, G. M., Heaphy, E. D., & Quinn, R. E. (2005). Composing the reflected best-self portrait: Building pathways for becoming extraordinary in work organizations. *Academy of Management Review*, 30(4), 712–736, <https://doi.org/10.5465/AMR.2005.18378874>
- Rodan, R., & Galunic, C. (2004). More than Network Structure: How Knowledge Heterogeneity Influences Managerial Performance and Innovation. *Strategic Management Journal*, 25(6), 541-562, <https://doi.org/10.1002/smj.398>
- Russell, D. W., Peplau, L. A., & Cutrona, C. E. (1980). The Revised UCLA Loneliness Scale: Concurrent and discriminant validity evidence. *Journal of Personality and Social Psychology*, 39(3), 472-480, <https://doi.org/10.1037/0022-3514.39.3.472>
- Scott, S., & Bruce, R. (1994). Determinants of innovative behavior: a path model of individual innovation in the workplace. *Academy of Management Journal*, 37(3), 580–607, <https://doi.org/10.5465/256701>
- Seiter, J. S., & Bruschke, J. (2007). Deception and Emotion: The Effects of Motivation, Relationship Type, and Sex on Expected Feelings of Guilt and Shame Following Acts of Deception in United States and Chinese Samples. *Journal of Communication Studies*, 58(1), 1-16, <https://doi.org/10.1080/10510970601168624>
- Shalley, C., Gilson, L. L., & Blum, T. C. (2000). Matching creativity requirements and the work environment: Effects on satisfaction and intention to leave. *Academy of Management Journal*, 43(2), 215-223, <https://doi.org/10.5465/1556378>
- Shalley, S. E. (1991). Effects of productivity goals, creativity goals, and personal discretion on individual creativity. *Journal of Applied Psychology*, 76(2), 179– 185, <https://doi.org/10.1037/0021-9010.76.2.17>
- Shaver, P., & Brennan, K. (1991). *Measures of depression and loneliness, in measures of personality and social psychology attitudes* (J. Robinson and P. Shaver, L. Wrightsmann ed.). San Diego, CA: Academic Press.
- Sica, L. S., Ragozini, G., Palma, T. D., & Sestito, L. A. (2017). Creativity as Identity Skill? Late Adolescents' Management of Identity, Complexity and Risk-Taking. *The Journal of Creative Behaviour*, 53(4) 457-471, <https://doi.org/10.1002/jocb.221>
- Sturman, M. C. (2003). Searching for the inverted u-shaped relationship between time and performance: Meta-analyses of the experience/performance, tenure/performance, and age/performance relationships. *Journal of Management*, 29(5), 290-316, [https://doi.org/10.1016/S0149-2063\(03\)00028-X](https://doi.org/10.1016/S0149-2063(03)00028-X)
- Tajfel, H., & Turner, J. C. (1985). *The social identity theory of intergroup behavior*. England: University of Bristol.
- Tang, C., Shang, J., Naumann, S. E., & von Zedtwitz, M. (2014). How Team Identification and Expertise Identification Affect R&D Employees' Creativity. *Creativity and Innovative Management*, 23(3), 276-289, <https://doi.org/10.1111/caim.12069>
- Tierney, P., & Farmer, S. M. (2002). Creative Self-Efficacy: Its Potential Antecedents and Relationship to Creative Performance. *Academy of Management Journal*, 45(6), 1137-1148, <https://doi.org/10.5465/3069429>
- Tierney, P., Farmer, S. M., & Graen, G. B. (1999). An examination of leadership and employee creativity: The relevance of trait and relationships. *Personnel Psychology*, 52(3), 591-620, <https://doi.org/10.1111/j.1744-6570.1999.tb00173.x>
- Turner, J. C. (1975). Social comparison and social identity: Some prospects for intergroup behaviour. *European Journal of Social Psychology*, 5(1), 5-34, <https://doi.org/10.1002/ejsp.2420050102>
- Turner, J. C., Hogg, M. A., Oakes, P. J., Reicher, S. D., & Wetherell, M. S. (1987). *Rediscovering the social group: A self-categorization theory*. Basil Blackwell.
- Unsworth, K. (2001). Unpacking creativity. *Academy of Management Review*, 26(2), 289-297, <https://doi.org/10.5465/AMR.2001.4378025>

- van Dick, R., Wagner, U., Stellmacher, J., & Christ, O. (2004). The utility of a broader conceptualization of organizational identification: Which aspects really matter? *Journal of Occupational and Organizational Psychology*, 77(2), 171–191, <https://doi.org/10.1348/096317904774202135>
- Van Knippenberg, D. (2000). Work motivation and performance: A social perspective. *Applied Psychology: An International Review*, 49(3), 357-371, <https://doi.org/10.1111/1464-0597.00020>
- Vugt, M. V., & De Cremer, D. (1999). Leadership in Social Dilemmas: The Effects of Group Identification on Collective Actions to Provide Public Goods. *Journal of Personality and Social Psychology*, 76(4), 587-599, <https://doi.org/10.1037/0022-3514.76.4.587>
- Weisberg, R. W. (1999). *Creativity and knowledge: A challenge to theories* (226-248 ed.). New York: Cambridge University Press.
- Weiss, R. S. (1973). *Loneliness: The experience & emotional social isolation*. Cambridge, MA: MIT Press.
- West, M. A., & Farr, J. L. (1989). Innovation at work: Psychological perspectives. *Social Behaviour*, 4(1), 15-30.
- Wright, S. L., Burt, C. D., & Strongman, K. T. (2006). Loneliness in the Workplace: Construct definition and scale development. *New Zealand Journal of Psychology*, 35(2), 59-69.
- Zehrer, A., & Mossenlechner, C. (2009). Key Competencies of Tourism Graduates: The Employers' Point of View. *Journal of Teaching in Travel & Tourism*, 9(3), 266–287, <https://doi.org/10.1080/15313220903445215>
- Zhang, X., & Bartol, K. M. (2010). Linking empowering leadership and employee creativity: The influence of psychological empowerment, intrinsic motivation, and creative process engagement. *Academy of Management Journal*, 53(1), 107-128, <https://doi.org/10.5465/AMJ.2010.48037118>
- Zhou, X. (2018). A review of researches workplace loneliness. *Psychology*, 9(5), 1005-1022, <https://doi.org/10.4236/psych.2018.95064>

Appendix A: Survey Instrument

Please indicate the extent to which you agree with the following statements regarding your work-related feeling, behaviors. (1 = Strongly Disagree, 7 = Strongly Agree)		Strongly Disagree	Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Agree	Strongly Agree
1	I lack companionship in this group	1	2	3	4	5	6	7
2	I feel isolated from others	1	2	3	4	5	6	7
3	People are around me but not with me	1	2	3	4	5	6	7
4	There is no one I can turn to	1	2	3	4	5	6	7
5	There are people I can turn to	1	2	3	4	5	6	7
6	I do not feel alone	1	2	3	4	5	6	7
7	There are people I feel close to	1	2	3	4	5	6	7
8	I can find companionship when I want	1	2	3	4	5	6	7
9	Making a lasting contribution to groups that I belong to, such as my work organization, is important to me	1	2	3	4	5	6	7
10	When I become involved in a group project, I do my best to ensure its success	1	2	3	4	5	6	7
11	I feel great pride when my team or group does well, even if I'm not the main reason for its success.	1	2	3	4	5	6	7
12	I would be honored if I were chosen by an organization or club that I belong to, to represent them at a conference or meeting.	1	2	3	4	5	6	7
13	When I'm part of a team, I am concerned about the group as a whole instead of whether individual team members like me or whether I like them	1	2	3	4	5	6	7
14	I see myself as someone with unique characteristics	1	2	3	4	5	6	7
15	I am different from other people	1	2	3	4	5	6	7
16	I feel like a unique person	1	2	3	4	5	6	7
17	I often agreed to help my colleague but never really intended to	1	2	3	4	5	6	7
18	I agreed to help colleagues but instead gave him/her different information from what s/he wanted	1	2	3	4	5	6	7
19	I often told my colleague that I would help him/her out later but stalled as much as possible	1	2	3	4	5	6	7
20	I often pretended that I did not know the information	1	2	3	4	5	6	7
21	I introduce new approaches to improve my work	1	2	3	4	5	6	7
22	I change minor work procedures that I think are not productive	1	2	3	4	5	6	7
23	On my own, I change the way I complete my job to make it easier to myself.	1	2	3	4	5	6	7
24	I rearrange work that I think are not effective on my own.	1	2	3	4	5	6	7
25	I identify strongly with my team	1	2	3	4	5	6	7
26	My team values are similar to my values.	1	2	3	4	5	6	7
27	My team an important reflection of who I am	1	2	3	4	5	6	7
28	I feel loyal to my team	1	2	3	4	5	6	7

Please answer the following demographic questions.

- 29 Gender : ☐Male ☐Female
- 30 Age : _____
- 31 Education: ☐High School or below ☐Associate Degree ☐Bachelor's Degree ☐Master's Degree or above
- 32 I have been working in the current team/department for ____Years ____Months
- 33 I have been working for this company for ____Years ____Months
- 34 My job position level: (please highlight the option that fits your job level)
1. lowest (entry- employee)
 2. low
 3. middle
 4. high
 5. highest (top management)